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ABSTRACT

This paper was presented at a symposium bringing together persons with experience and expertise associated with organizational development in schools. The Improving Teaching Competencies Program at the Northwest Regional Educational Laboratory has been developing 15 sets of training materials to be used in organizational improvement strategies with public schools. A description is presented of (1) some needs apparent in the mid-1960s that generated the efforts to create these training materials and to support training of trainers, (2) the issues at that time that needed answers, (3) a number of actions that have been taken, (4) answers that have been found for some of the issues, and (5) suggestions for work that is yet to be done. (Author/MLF)

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TRAINING MATERIALS AND TRAINERS FOR ORGANIZATIONAL DEVELOPMENT IN EDUCATION

Charles C. Jung, Ph.D.

Introduction

In the Improving Teaching Competencies Program at the Northwest Regional Educational Laboratory we have been developing fifteen sets of training materials to be used in organizational improvement strategies with public schools.[1,2] The individual effectiveness of ten of the systems which have been completed has been determined.[3] Individual effectiveness of the five still being completed as our program finishes this year has begun to appear evident. A developmental model of how organizations may change and evolve has been conceptualized and proposed in this program.[4,5]

The sets of training materials have only begun to be used in combinations as part of organizational development strategies. Earlier, they tended to be used by colleges or school districts for inservice training workshops on an occasional basis. More recently, combinations have been used for facilitating racial integration efforts such as in the Minneapolis, Minnesota, schools, to prepare internal cadres of training consultants in Portland, Oregon, and Seattle, Washington, to provide a core of experiential learnings for advanced degree programs such as in the Fairfax County, Virginia, schools, to further the expertise and visibility of over five hundred professionals doing training and consulting in schools, and in some cases, as an explicit effort to increase self renewing functional capabilities of particular organizations.

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As these materials become used in combinations for alternative strategies, studies of educational change become more possible and more necessary. These training packages may make large scale system interventions more feasible and easier to control and document. They raise a new round of issues and questions for both practice and research.

This paper will present a description of some of the needs which seemed apparent in the mid 1960's which generated the efforts to create these training materials and support training of trainers, the issues at that time which seemed to need answers, a number of actions which have been taken, answers found for some of the issues, and suggestions of work yet to be done.

Some Apparent Needs in 1966

A sizeable body of literature was generated out of the 1960's and into the 1970's concerning shortcomings in our system of public education and needs for improvement.[6,7,8,9,10] At that time, the author was involved in the Cooperative Project for Educational Development (COPED) which sought to study models of planned change for educational improvement. COPED was a consortium of eight universities[11] and about twenty-five school districts coordinated by the National Training Laboratories--Institute for Applied Behavioral Science. Massive amounts of system level data were collected and large scale interventions were initiated. Funding was postponed between the second and third years of the intended three years of the COPED project ending the change interventions and disrupting the data collection and processing.

Nevertheless, COPED provided some prototype intervention strategies,[12] temporary linkages between schools and universities, lasting collegial bonds among individuals, training experiences for both school district and university personnel,[13] and improvement of some methodology for both research and local diagnostic uses.[14]

COPED also provided insights as to some apparent needs if progress were to be made at the level of discovering ways to study and to improve educational organizations. Major among these were apparent needs for: 1) explicated models of how educational organizations function and may change; 2) training systems that could be used more widely and economically to improve organizational functioning; 3) training consultants with intermediate levels of knowledge and skills, locally based or available to link with the comparatively few social science experts in this field; and, 4) improved methodology for research, diagnostic and evaluation purposes.

The outcomes of the COPED effort were greatly restricted by these needs. Models of planned change and efforts to study them were limited by the state of the art. As one COPED staff member said to a critical U. S. Office of Education review panel member, "You thought we were working with a bulldozer, but now you've discovered that all we have are shovels and wheelbarrows." The author of this paper became convinced, continuing with another analogy, that some new kinds of bricks and mortar had to be created before alternative types of structures could be built and their comparative applications studied.

Some Issues that Needed Answers

The four apparent needs identified from the COPED project generated a set of issues needing answers. Organizational theory and research up to that time indicated that organizational improvement would need to involve changed functioning of communications, influence, decision making,[15] and various forms of "problem solving adequacy."[16] It was presumed that improvement of these functions would often be needed to support improvements of structure, instructional functions and learner behaviors.[17] The kind of dynamic models of organizational functioning being explored in industry[18] were needed appropriate to the unique aspects of educational systems.

Training for educational personnel in such areas was expensive. It generally involved high priced individuals who were experts in the substance of what was to be learned as well as ways to provide "process" training experiences. There were few behavioral scientists with such combined expertise. The training designs they used, and limited availability of training materials, generally limited them to working with small groups at a time.

The following were some of the major issues that needed answers.

1. Could effective training in interpersonal skills and different kinds of problem solving be provided using packages of materials with designs conducted by non-experts?
2. Could such an approach be made attractive enough in terms of interest and enjoyment in the training experience, and reasonable enough in terms of cost in dollars and time, so that large numbers of educators would take this training?

3. Would those who provide and implement such training accept and use these training packages? Would they be acceptable for credit by degree granting institutions? Would schools use them for inservice education?

4. Could such training resources be extended to increase the number of trainers with intermediary and advanced capabilities for improving organizations? That is, could packaged training systems be developed to help in training trainers beyond the general systems for interpersonal skills and kinds of problem solving?

5. Could a staff developing such training resources contribute to conceptualizing dynamic models that offered resolution of some of the disagreements that were current? Such disagreements involved differences in problem solving orientations as well as philosophic assumptions about the nature of people and of organizations. Without some progress in synthesizing, or at least clarifying, some issues, apparent conflicts between forms of training seemed potentially confusing or destructive.

6. Could methodology be identified or created to adequately evaluate efforts to develop training resources and train trainers? If so, it might offer added resources both to research and diagnoses of local change efforts.

Some Actions Taken

In 1967 the Improving Teaching Competencies Program of the Northwest Regional Educational Laboratory (NREL) was developing four sets of training materials (they eventually were labeled instructional systems) focused on pupil-teacher interactional concepts and skills. These included versions of Flander's "Interaction Analysis,"[19] Taba's "Higher Level Thinking Abilities,"[20] Suchman's "Facilitating Inquiry,"[21] and Cogen's clinical supervision labeled, "Systematic and Objective Analysis of Instruction."[22]

From 1968 through 1975, the program was expanded to include packaged training systems concerned with: 1) the role of being a learner; 2) three different kinds of problem solving; 3) interpersonal skills; and 4) training trainers for skills training, consulting and organizational development. Diagram I gives the titles of these systems. They are described in the literature[1] and in materials available from the NREL. Approximately five million dollars will have been spent on this program by its conclusion in November of 1975. The program efforts have been primarily in materials creation, field trials and evaluation, building field relationships, public relations, work with publishers, and political concerns, especially for federal funders.

A clarification was identified and proposed concerning the differences between, and relationships among, three kinds of logical problem solving. The basic conception was presented in a paper at the 1971 AERA Convention. It is proposed that technical issues call for some type of system technology, theoretical issues occurring in field settings call for a version of action research, and social conflict issues raise a need for negotiative capabilities.

DIAGRAM I: FIVE CATEGORIES OF INSTRUCTIONAL SYSTEMS BEING DEVELOPED IN THE IMPROVING TEACHING COMPETENCIES PROGRAM

CATEGORY	TEACHING FOR AFFECTIVE GROWTH	PUPIL-TEACHER INTERACTION	OBJECTIVE ANALYSIS AND PLANNED CHANGE	INTERPERSONAL RELATIONS	PREPARING EDUCATIONAL TRAINING CONSULTANTS (PETC)
TITLES OF INSTRUCTIONAL SYSTEMS	Cross-Age Peer Help (A training manual supplement to a system developed by the Lippitts.) Relevant Explorations in Active Learning (14 pairs of mini packages for youth and adults)	Systematic and Objective Analysis of Instruction Interaction Analysis Higher Level Thought Processes Developing Inquiry in the Classroom Teaching Responsively for Individualized Meaning	System Approach for Education Research Utilizing Problem Solving Social Conflict and Negotiative Problem Solving	Interpersonal Communication Interpersonal Influence	PETC-I: Skills Training PETC-II: Consultation PETC-III: Organizational Development

Much continuing confusion and difficulty in education, as well as other areas of society, seems related to lack of skills in each of these kinds of problem solving and differentiation among them. We have worked on training systems for each of the three. They are "System Approach for Education" (SAFE: with R. E. Corrigan, Associates),[23] "Research Utilizing Problem Solving" (RUPS),[24] and "Social Conflict and Negotiative Problem Solving."[25]

While each problem solving system involves its own techniques for problem identification and needs sensing, it appears that a generic model of needs assessment is much needed which would include a clarification of which of these three kinds of problem solving is central for a given issue. Only through such clarification are the appropriate criteria for decision making in problem solving efforts likely to be applied. Clarity could also allow the relation of applications of each kind of problem solving to be kept straight as one moves back and forth between them during an improvement project.

Eight training packages from the program are conceived as providing a sequence of learning experiences to prepare individuals and involve them in organizational development work in educational institutions. These include the three for the different types of problem solving, two which focus on interpersonal skills labeled, "Interpersonal Communications,"[26] "Interpersonal Influence,"[27] and a trio with the overall title, "Preparing Education Training Consultants" (PETC) including "PETC I: Skills Training,"[28] "PETC II: Consulting,"[29] and "PETC III: Organization Development."[30] Diagram II gives their recommended order of use and some brief information about each.

DIAGRAM II

RELATIONSHIP OF THE THREE PETC SYSTEMS

	PETC-I: Skills Training	PETC-II: Consulting	PETC-III: Organizational Development
Usual Client System	Individual or small group	Small group or major subsystem of the organization	The organization (although most of the work may be with a major subsystem)
Assistance for Client	To increase process skills such as goal setting, communicating, influencing or decision making	To move through phases of an improvement effort	To add and maintain improved functional capability To increase those functional capabilities that enable the organization to add new kinds of objectives or use new kinds of resources
Competencies of the PETC Consultant	Diagnosis for, and provision of, group process skills training exercises	Differential diagnosis and intervention to provide added functions in a temporary relationship	Application of diagnostic and intervention techniques to facilitate normative and structural changes in the organization which a) maintain improved functions and b) make its identity and decision-making dynamic in response to social change
Usual Duration of the Client Relationship	A few hours or days	A few days or weeks	Several months to four or five years
Prerequisite Competencies	Trainer Experience In: Action Research (RUPS) Interpersonal Communications (IPC)	PETC-I Interpersonal Influence (INF)	PETC-II System Technology Conflict and Negotiations in Education

An initial conception of the relation of packaged training materials and training of trainers was proposed in a position paper presented to the National Training Laboratories and at an invitational conference at the Western Behavioral Sciences Institute in 1968. Diagram III presents the general schema of that conceptualization. It was furthered, among other sources by ideas generated at Ronald Havelock's "Conference on Educational Change Agent Training,"[31] which the author helped design and chaired.

A major synthesizing element was derived by borrowing from developmental models of individual human growth and proposing their application to organizations. It appeared to the author that many organizational development efforts ran into trouble, not so much because of the substantive issues which consultants tend to infer, but because the form of innovations being introduced were out of phase with the "maturity" of the organization. In addition to models of planned change, organizational health, differential diagnosis, differential intervention, and organizational growth, the PETC III materials introduce a model of organizational maturity. Whereas growth is defined as balance and strength of functions in relation to an organization's purpose, maturity is defined as the characteristic ways in which sixteen presumed key functions occur in an organization. This opens a whole set of dimensions for entry, work and closure with an organization. Diagram IV presents descriptions of functions in each of four phases of maturity. It, and Diagram V indicating predictive guidelines for the intervening consultant, are taken out of context from the PETC III materials.

DIAGRAM III: A MODEL OF DEVELOPING PROCESS TRAINERS

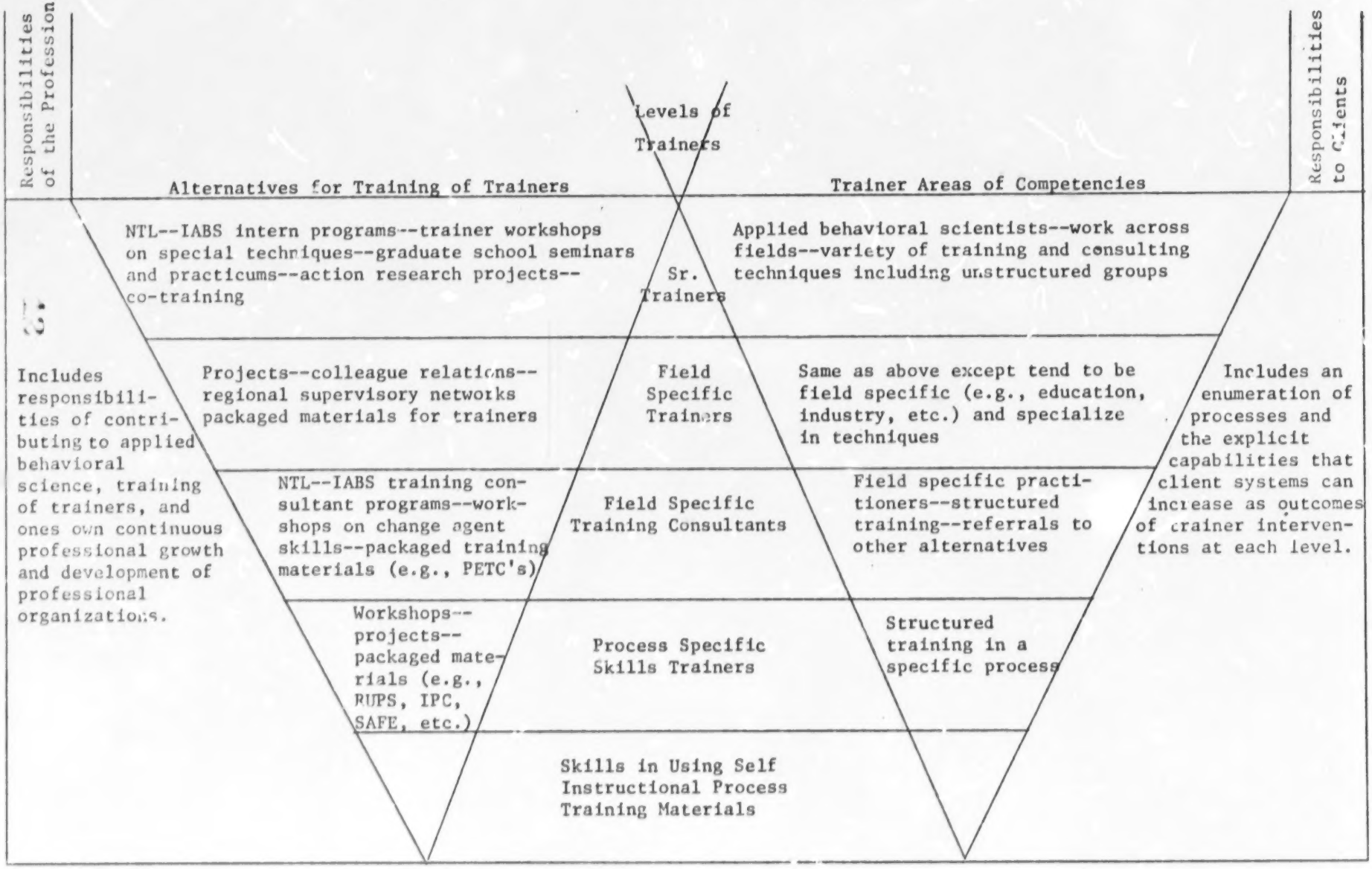
Responsibilities of the Profession
Levels of Trainers
Alternatives for Training of Trainers
Trainer Areas of Competencies
Responsibilities to Clients
NTL--IABS intern programs--trainer workshops on special techniques--graduate school seminars and practicums--action research projects--co-training
Sr. Trainers
Applied behavioral scientists--work across fields--variety of training and consulting techniques including unstructured groups
Includes responsibilities of contributing to applied behavioral science, training of trainers, and ones own continuous professional growth and development of professional organizations.
Projects--colleague relations--regional supervisory networks packaged materials for trainers
Field Specific Trainers
Same as above except tend to be field specific (e.g., education, industry, etc.) and specialize in techniques
Includes an enumeration of processes and the explicit capabilities that client systems can increase as outcomes of trainer interventions at each level.
NTL--IABS training consultant programs--workshops on change agent skills--packaged training materials (e.g., PETC's)
Field Specific Training Consultants
Field specific practitioners--structured training--referrals to other alternatives
Workshops--projects--packaged materials (e.g., RUPS, IPC, SAFE, etc.)
Process Specific Skills Trainers
Structured training in a specific process
Skills in Using Self Instructional Process Training Materials

DIAGRAM IV: FORMS OF FUNCTIONAL CAPABILITIES OF ORGANIZATIONS AT DIFFERENT PHASES OF MATURITY

PROBLEM SOLVING ADEQUACY FUNCTIONS

Function	Phases of Maturity: Stereotypic	Opinionated	Existential	Creative
Technical Problem Solving	Technical problems dealt with according to tradition and authoritarian decree--technical analysis and planning not generally conceived by individuals a logical process--low level of data objectivity	Some part of organization uses explicit system technology process to deal with some technical issues--other parts deal with technical issues according to experience or opinion--system technology sometimes applied to wrong kinds of issues--lack of shared understanding or norms for application--variable data objectivity	Different parts of organization use different system technology procedures without shared knowledges of differences--consequent lack of norms for coordinated effect or purpose or differentiated application in terms of kind of issue--data objectivity limited by restricted perceptions	Parts use shared, explicit system technology process with skills appropriate to their roles--norms support its use with explicit differentiation and relation to other kinds of logical problem solving processes--some roles and structure provide specialist expertise--high level of data objectivity
Theoretical Problem Solving	Theoretical issues dealt with according to prejudged stereotypes--action research not conceived as logical process--power of theoretical models not recognized--oriented toward traditions rather than solution--seek facts to support standard practice--low level data objectivity	Some part of the organization uses explicit action research process to deal with some theoretical issues--other parts deal with theoretical issues according to experience or opinion--action research may sometimes be applied to wrong kinds of issues--lack of shared understanding of an action research process or norms for its application--variable data objectivity	Different parts of organization use different action research procedures without shared knowledge of differences--consequent lack of norms for coordinated effect on purpose or differentiated application in terms of kind of issue--data objectivity limited by restricted perceptions	Parts use shared, explicit action research process with skills appropriate to their roles--norms support its use with explicit differentiation and relation to other kinds of logical problem solving processes--some roles and structure provide specialist expertise--high level of data objectivity
Philosophical Problem Solving	Philosophical issues not generally recognized as such--ignored, denied or redefined as traditional issues with predetermined resolution--conflict and negotiation not conceived as a logical process--data objectivity not considered in terms of differing self interests	Some conflict acknowledged with some parts of organization using explicit negotiations process--little understanding of the philosophical basis of conflict--process tends to be applied with implicit assumptions of eliminating issues, antagonists or power--lack of shared understanding or norms for application--may be applied to wrong kinds of issues--variable data objectivity	Different parts of organization use different negotiations procedures without shared knowledge of the differences--consequent lack of norms for coordinated effect on purpose or differentiated application in terms of kind of issue--philosophical basis understood and norms exist for confronting conflict and negotiating to manage it--data objectivity limited by restricted perceptions	Parts use shared, explicit negotiations process with skills appropriate to their roles--norms support its use with explicit differentiation and relation to other kinds of logical problem solving processes--some roles and structure provide specialist expertise--high level of data objectivity
Needs/ Opportunities Assessing	Needs or opportunities are generally considered only in relation to given, often implicit, objectives--while techniques may exist for assessing needs within these givens, there is no explicit process for assessing overall organizational needs from any given kind of problem perspective, much less a differential one--low level data objectivity--needs defined on a superficial or symptom level	Some part of the organization occasionally uses an explicit needs assessment procedure that is limited to one kind of problem orientation, most often either technical or theoretical--such procedures generally relate to given kinds of objectives and resources rather than raising consideration of new ones--variable data objectivity	Different parts of organization use different needs assessing procedures with differing emphasis toward one or another kind of issue and problem solving procedure--some openness to new kinds of objectives and resources in the process--data objectivity limited by restricted perceptions	Parts use shared explicit needs assessing process with skills appropriate to their roles--norms support its use in maintaining review of objectives, resources, and appropriate relationship of kinds of problem solving efforts--some roles and structure provide specialist expertise--high level of data objectivity--process seeks new kinds of objectives and resources to better fulfill organizations purpose

DIAGRAM IV (Cont.)

MANAGING FUNCTIONS

Function	Phases of Maturity: Stereotypic	Opinionated	Existential	Creative
Communicating				
- Content	Ritualistic, routine, repetitive, redundant--much not shared especially concerning values, decision making, or conflict generating issues--about who, what and when	Much routine and ritualistic--some sharing about decision making--about goals, procedures, accomplishments and barriers--some about policy	Some routine--short lived rituals--much on current innovations focusing on how and why as well as who, what and when--about values and directions of effort as well as the efforts themselves	Some routine and ritualistic--periods of "silence" evident--about implications related to purpose as well as achievement--about the system as an end as well as a means
- Directionality	Generally initiated from the top down--mostly vertical within subparts--upward initiations mostly of a positive nature	Directions from top down--suggestions, and sometimes demands, sent upward--horizontal as well as vertical within subparts--occasional feedback loops	Initiated from any part of systems--not always well targeted for relevance--much "noise" in the system--some feedback loops	Initiated from any part of the system--targeted to relevant others, horizontally and vertically, positive and negative--clear feedback loops
- Structure	Formal--lack of representativeness of subparts--lack of linking roles or techniques between subgroups--secretive informal "grapevines"	Formal across subparts--informal within subparts--some representativeness but linkages mostly vertical and near top of hierarchical structure--fairly open "grapevine"	Mostly informal--vertical linkages throughout structure, but lack of possible horizontal ones	Shared knowledge and access concerning both formal and informal means--both vertical and horizontal linkages
- Purpose	To control activity and fulfill routines	To provide directions, information, clarifying meaning	To clarify meaning, seek and share ideas, exchange occasional feedback	To seek meanings, generate alternatives, maintain a guiding system of feedback
- Quality	Closed--inaccurate	Guarded except within subparts--significant areas of inaccuracy	Openness across some subparts--generally accurate--some opportunity	Openness within and between subparts--high accuracy--high spontaneity
Structuring	Fixed, hierarchical structure maintained by unquestioned tradition and assumptions--new roles or structured change are top policy and administrative concern since they are viewed as embodying the identity of the organization	"Line and staff" differentiation common--changes of role, individuals in roles, and subparts are common way to respond to problems with little attention to related changes in policy, procedures or outcomes--new structure endures to extent it contributes to centrally defined objectives	Structure is decentralized with continuous alterations of grouping and occasional birth or death of a subpart--major divisions are relatively long lasting according to their independent success	Functional matrix orientation provides organizing of temporary subsystems to accomplish tasks appropriate to purpose--maintaining a structured capability to fulfill purpose is valued while maintaining any particular structure is not--structuring is proactive and reactive as kinds of objectives and resources change since identity is a commitment to purpose other than structure
Influencing	Most procedures and criteria implicit--power in the system likely to be seen as low and unequal--much "reward" power and "coercive" power used	Some procedures and criteria explicit--power may be high, but most likely seen as unequal between roles and between subparts--much interpersonal "referent" power mixed with other kinds	Procedures and criteria are explicated repeatedly within subparts--power levels and equalization may vary between subparts	Variety of procedures and criteria are explicit--power in the system is high and widely equalized within and between subparts--power uses experienced as appropriate, though variable, in relation to kinds of problem situations

DIAGRAM IV (Cont.)

MANAGEMENT FUNCTIONS THAT PROVIDE CONDITIONS FOR CREATIVITY, Cont.

Function	Phases of Maturity: Stereotypic	Opinionated	Existential	Creative
Decision Making	By high level authority roles—according to tradition--mostly implicit criteria--major decisions made high in the hierarchy--most accept task decisions as predetermined by their role definition	By authority roles throughout the system--according to fairly explicit policies and procedures determined at high authority levels--many routine task decisions made at level of implementation	Diffused to subparts of the system for most issues--procedures variable between subparts--policies frequently questioned and excepted--many exploratory and innovative, as well as routine, task decisions made at level of implementation	By differential role functional responsibility--made explicit in some form of task/decision matrix--decisions tend to be made by implementers and those with "legitimate" or "expert" power--frequent decisions about decision making by those affected and/or responsible
Rewarding	Extrinsic--serves to maintain roles, status differences, structure and procedures--mostly for implicitly understood role task performance and achievements	Extrinsic for most roles--also intrinsic for roles high in hierarchy--serves mostly to maintain status quo of system--for goal achievement and functional performance	Intrinsic and extrinsic--sometimes contradictory or conflicting between subparts of system--serves to induce change and innovation--for innovation as well as goal achievement and functional performance	Intrinsic and extrinsic variable in relation to individual differences, but influencing towards self-actualization--serves to maintain high productivity along with openness to changes that improve the systems fulfillment of purpose--for explicating meaning as well as other accomplishments
Leadership Style of Coordinating	Coordinating efforts occur sporadically in the form of directives from persons in top roles in each level of an administrative hierarchy. There is an assumption (often implicit) that organizational structure along with formal policies and procedures are sufficient to provide for all coordinative needs. People are expected to know and do their jobs in unchanging ways and in an unchanging world. Therefore, once a "proper" pattern is set, it is expected that things will stay coordinated. Whenever it becomes apparent that they have not, a change in structure, personnel or conditions is generally provided as part of the solution. Coordinating is not recognized as an ongoing procedural issue.	Coordinating efforts occur repeatedly in different parts and levels of the organization. There is a generally explicit assumption that structure, policies and procedures will need to be repeatedly altered to provide coordination. Coordination needs are to be brought to the attention of superiors in the hierarchy who are responsible for making alterations which provide for them. Problems, new objectives or new opportunities are expected to recoordinate people's efforts. The need for some procedural skills to make changes which improve coordination is recognized. The conception of providing coordination as a part of continuous planning and problem solving processes does not exist generally throughout the organization.	Coordinating occurs fairly continuously within most parts of the organization, but does not exist in an integrated way across the organization as a whole. Different kinds of problem solving processes, sometimes involving differing levels of capabilities, may predominate in coordinating efforts of different parts of the organization. Put simply, there are many kinds of coordinating efforts, but they tend to be poorly coordinated with each other. Coordination efforts for the organization as a whole may be initiated by many parts at various times, but response may be initiated by many parts at various times, but response may be mixed, conflicting or lacking from other parts.	Coordinating occurs as a part of continuous planning and problem solving processes within and between all parts of the organization. Structure is seen as supportive to coordination (e.g., "link-pin" roles, role representatives in decision making groups) rather than providing it (e.g., "Everyone should know, and follow the orders of, the boss of their unit.") Individuals with expertise and responsibility for implementation on any particular issue are accepted by others in taking temporary coordinative leadership responsibility. Anyone who identifies a need for coordination initiates a problem solving process to respond. Explicit norm operates of everyone sharing responsibility for maintaining good coordination.

DIAGRAM IV (Cont.)

ATTRIBUTING MEANING TO EXPERIENCE FUNCTIONS

	Phases of Maturity			
Function	Stereotypic	Opinionated	Existential	Creative
Valuing	In terms of role performance	In terms of functional capability and achievement of objectives	In terms of exploration, innovation and discovery in addition to functional capability and achievement of objectives	In terms of values exploration and creative fulfillment of purpose
Perceiving	From perspective of role and structure	From perspective of functions and objectives	From perspective of commitment to creative exploration	From perspective of commitment to confrontation of values and implications to purpose

DIAGRAM IV (Cont.)

SUPPORTING PERSONAL AND PROFESSSONAL GROWTH FUNCTIONS, Cont.

Function	Stereotypic	Opinionated	Existential	Creative
Confronting Apparent Discrepancies	Very little confronting--discrepancies often not recognized--often avoided when they are recognized--generally viewed as unusual departures from status quo which is considered normal--seldom accepted as evidence of need for altering capabilities, resources, procedures, or other aspects of organization	Some confronting--mainly in areas clearly seen as affecting organizational performance or currently acknowledged social issues and new practices--fails to recognize, or ignores, discrepancies that could imply proactive, as compared to reactive, changes--once legitimized, can lead to training, problem solving and other alterations of functional capability	Very open to confrontations--leads often to training in new capabilities or trial of innovations--may attempt to respond beyond the organizations readiness and/or beyond its purpose involving high risk to health of the organization--resulting conflicts cause fluctuations in openness to confrontation	Always open to consider the relevance of apparent discrepancies in relation to fulfilling the purpose of the organization--selectively responsive in terms of relevance of the issue and momentary readiness of the organization to respond orientation of seeking confrontations whenever able to be responsive as basis for ongoing professional development program and the organization's continuous evolution
Training	Very little training other than to fit predefined role needs--individuals expected to come to jobs with capabilities that won't need to vary--no ongoing program for job mobility or professional development	Some provisions made for training as a continuous function of the organization--training orientation mostly toward events to meet currently recognized needs allowing some mobility--more oriented toward changing roles needs than a professional development orientation of individual growth organizational evolution	High level of training to support innovations and professional growth orientation--but, not clearly or well related to coordinated growth and evolution of the organization in terms of fulfilling its purpose	Professional and personal development seen as an ongoing function of the organization necessary to its continuous evolution--growth of individuals is expected to result in their introducing relevant changes in the organization rather than the organization simply oriented towards training them to meet its need
Providing Learning Resources	Organization not likely to provide resources for learning of individuals except when imposing introduction to a new procedure--release time or other learning resources not supported as legitimized part of most roles--when learning is supported, resources outside the organization are used	Organization provides some resources for learning on a fairly regular basis--occasional upgrading of job capabilities is expected--some release time, flow of formal information, provision of involvement in demonstrations and collegial sharing supported--some internal inservice training roles and events provided as well as use of external resources	Organization provides high level of resources for learning, to strengthen functional capabilities, and especially in relation to innovations and explorations--nature and emphasis of learning resources varies according to current "fads"--lack of long-range planning or continuity in provision of resources	Organization provides learning resources as a continuous function of the organizations evolution and to support responsibility of all individuals to be continuous learners--time regularly built into all roles for various degrees of learning and training experiences--wide range of internal resources available plus clear procedures for access to external resources
Providing Performance Feedback	Performance reviewed in terms of fixed roles and tasks--individuals judged in terms of the demands of the role irrespective of the appropriateness of their placement in a role--feedback tends to involve labeling the individual as "good" or "bad" rather than as having done something well or poorly--more feedback is negative than positive--sporadic and unorganized--frequently indirect--used for direct behavior	Performance reviewed in terms of roles and tasks and, to some degree, accomplishment of objectives--feedback is often judgmental or interpretive--provided according to forms in formal reviews--move for direction and control, then to support individual growth	Performance reviewed in terms of professional and personal growth in relation to achievement of objectives and innovativeness--feedback is generally to support growth and innovativeness--often spontaneous--mainly for direction, but may also be recognized occasionally as a source of new perspective	Performance reviewed in terms of professional and personal growth and applications of functional capability in working alone, and with others, to fulfill the purpose of the organization in evolving ways--feedback is direct, spontaneous as well as planned for, and follows generally accepted guidelines for purpose of supporting growth of the individual--feedback seen as a source for confrontation that can lead to new ways of understanding rather than simply providing guidance toward pre set objectives

The area of individual maturity and personal growth seems vitally related to this type of conception of organizations. It raises many questions. For example: Can an organization increase the maturity of its functions beyond the maturity level of individuals in key influence positions? Does work on personal growth need to precede the introduction of certain forms of functional procedures? What types of leadership interventions versus norm building might be necessary to introduce certain forms of functions? Do some kinds of advanced functions facilitate individual movement in such maturity dimensions as Piagetian cognitive growth, Kohlberg's moral growth, or Loevinger's ego development? How can communication problems be coped with when they involve people at different levels of developmental maturity such that at least one, by definition, lacks the meanings of the other on an issue? Since educational organizations need be concerned with such issues of growth and development in terms of their central purpose, such questions seem to the author to be especially relevant for those who would seek to improve our schools.

One effort in our materials development program has sought to provide a personal growth experience concerned with recognizing and supporting the ownership of behavior. It is based on research and theory of linguists such as Chomsky and the interpersonal theory of psychotherapy of Harry Stack Sullivan. Using many concepts of the Sagans, Jean Butman and Fred Newton conducted some pioneering work in creating a system titled, "Teaching Responsively for Individualized Meaning" (TRIM).[31] It involved the most innovative and controversial of the program's evaluation efforts. Personal growth training is seen as different from organizational efforts in the Program. It may well need to be essentially related in a particular

PHASES OF MATURITY OF THE ORGANIZATION

VARIABLES TO CONSIDER IN FACILITATING INTERVENTION	STEREOTYPIC PHASE	OPINIONATED PHASE	EXISTENTIAL PHASE	CREATIVE PHASE
BOUNDARIES	Generally inflexible decision making procedures and rules-norms and values which are often implicit and not open to examination	Decision making procedures which can be altered on the basis of the organization's own experien e-norms and values may sometimes be explored from the inside	Quite permeable, but diffuse subgroupings-while it's easy to become part of a subgroups decision-making, it's difficult to affect the total system	Boundaries are either an explicit procedure for making decisions, or norms and influences that can be questioned using existing procedures
ENTRY	Easy entry if seen as an expert - quickly rejected if seen as making an error	Acceptance within the boundaries of the systemic decision making must be reclarified frequently	Entry into subparts of the system may be easy, but entry into total system decision making may be very difficult as it is diffuse	Generally negotiated-may take more time, but is apt to be most meaningful once achieved
USUAL ORIENTATION TOWARD CONSULTANTS	Push consultants toward playing an expert role-tend to be dependent on them-expect perfection from them	Counter-dependent rejection of help from "outsiders" - force consultant to prove himself as acceptable as an "insider"	Independent to the extent of ignoring potential resources of consultant-seeks innovative ness or support for its current innovative interests	Interdependent willingness to negotiate collaborative relationships for mutual benefit and growth
CHANGEABLENESS	Minor changes that stay within the stereotypically limited conception of "correct" purpose and procedures are easy-otherwise, change is very hard	Major change can occur over time in a constructive manner if the system is allowed to test out and assimilate improvements on its own terms	Many alterations are typically occuring continuously - a particular change may be easy to bring about, but very difficult to maintain	Always open to change, but demands evidence of need and feasibility to initiate, and proof of value to maintain
USUAL KIND OF CHANGE	Change is most often reactive in response to external forces	Change is most often intra-active based on felt needs of persons within the system	Change is most often inter-active at subsystem levels resulting in disruptive upheavals at the total system level	All three kinds of change are equally possible
ACCEPTANCE OF RESPONSIBILITY FOR CHANGE	Very low - tends to see external forces as responsible	Only responsible when change was generated internally	Sees all subsystems responsible for own changes, thus avoiding overall responsibility	Very high - sees own operation sharing responsibility with other organizations it is interdependent with
TYPICAL STRUCTURE	Represented by traditional hierarchical role groupings	Represented by traditional functionally oriented organizational chart	Represented by diagramming that combines role and functions with purposeful groupings	Represented by a matrix form of diagramming that indicates how resources can be regrouped flexibly to achieve changing objectives & use new resources
TYPICAL NORMS	Support the status quo - maintain traditions - don't "rock the boat" - expect and reward doing things in same old ways	Support competitive success and esprit de corps punish failure - reject outsiders and deny differences - demand primary loyalty to maintaining the organization	Value for experimentation and "doing your own thing" - anything new is expected to be good - almost anyone can enter, but few can influence	Support collaborative success while facing conflicts honestly, openness, risk-taking, trust - management by objectives and decision making by negotiation

DIAGRAM V: ORGANIZATIONAL MATURITY AND VARIABLES TO CONSIDER IN FACILITATING INTERVENTIONS

organizational development strategy. Our experience has been that the personal growth area scares the Hell out of our federal funders and is at least widely misconceived by most empiricists we have encountered. To be fair, it seems that misconceptions are nearly as often found the other way. If the two do really need to be frequently related in particular strategies, then priority must be given to incorporating and finding ways to use resistances of persons who hold such biases. The author acknowledges that they may sometimes be based in philosophical differences, but suspects they are more often a matter of individual maturity and cultural deprivation.

Outside of the work done on TRIM, evaluation in the program has been fairly conventional. It has been difficult to find appropriate instrumentation. Some creative work has been done which may prove a contribution to the field in and of itself. A different session at this years AERA convention is being devoted to several reports on this.[32] It may be worth noting that during earlier years in the regional laboratory setting we were constrained from using too many resources in research-like behavior. This eventually switched to criticism demanding more evaluation accompanied by great pressure for more conventional kinds of evaluation. In some ways, we are experiencing the greatest flexibility as we end the program at a time when the climate in education is such that everyone seems afraid to demand anything.

Answers for Some of the Issues

From the actions of the Improving Teaching Competencies Program taken over the past seven years, we now have answers for some of the issues which were identified from the COPED project of the 1960's. Here are the questions posed earlier with some responses we can now make.

1. Could effective training in interpersonal skills and different kinds of problem solving be provided using packages of materials with designs conducted by non-experts?

The answer is yes. At the Northwest Regional Educational Laboratory (NREL) we have developed the systems titled Interpersonal Communications, Interpersonal Influence, and a version of action research titled Research Utilizing Problem Solving. Evaluation during this development indicates trainees make significant gains on cognitive achievement, behavioral skills, and changes in attitudes. Follow up surveys indicate that gains are applied in schools. Those findings are reported in detail in our technical reports available from the NREL.[33] The data further indicates that a high percentage of non-experts are likely to be able to conduct successful workshops using these materials once familiar with a system. We collaborated with R. E. Corrigan Associates on adapting their version of system technology for teachers. This system, called System Approach for Educators, also provides significant gains. It was not, however, adapted to a degree where we were able to establish that non-experts can be expected to successfully conduct workshops.[34] We are well into creation of a system titled Social Conflict and Negotiative Problem Solving.

2. Could such an approach be made attractive enough in terms of interest and enjoyment in the training experience, and reasonable enough in terms of the cost in dollars and time, so that large numbers of educators would take this training?

The answer is yes. Participants in final field tests rated the interpersonal systems very satisfying and worthwhile (92 percent for Interpersonal Communications and 97 percent for Interpersonal Influence) to a greater degree than the problem solving systems (76 percent for Research Utilizing Problem Solving: RUPS). The lower ratings for the latter came principally from sites where participants had recently had positive experiences with open ended encounter group training and resisted the structure in the designs of our systems. We have also found evidence of resistance in sites where participants were directed to attend or where negative conflicts had been occurring in the schools. Under conditions of voluntary attendance, appropriate expectations and a non conflicted school setting, participants at RUPS workshops have also tended to respond positively above the 90 percent level.

The workshops take about a week. Materials for a participant cost between $10.00 and $15.00 for Interpersonal Communications and Research Utilizing Problem Solving. We expect Interpersonal Influence and Social Conflict and Negotiative Problem Solving to be in this same range. Participant questionnaire responses indicate an overwhelmingly positive acceptance of these times and dollar costs. Sales and reports of user sites indicate that widespread use of Interpersonal Communications and RUPS has begun since they became commercially available two years ago.

Sixteen thousand five hundred thirteen (16,513) sets of Interpersonal Communications have been sold. We are told that approximately 3,000 teachers in Minneapolis have been through these systems. We are told that virtually all teachers in Duluth, Minnesota have been through RUPS. We know of workshops held in 30 states plus the district of Columbia and six foreign countries since development on these systems began. We are already experiencing a demand for our other systems prior to their completion.

3. Would those who provide and implement such training accept and use these training packages? Would they be acceptable for credit by degree granting institutions? Would schools use them for inservice education?

Answers to the last two questions are definitely yes. For example, during the summer of 1974 we were told of 16 higher education institutions which offered 36 workshops using our systems. We suspect others were not reported to us. Our systems are used around the year for inservice training by school districts. Two higher education institutions are building advanced degree programs around our systems and others are considering this possibility.

Answer to the first question is probably mixed and seems worthy of some careful study. We expect that our systems encounter an N.I.H. (Not-Invented Here) factor common to most educational innovations. We have had some indications of four phenomena in this regard. In some instances, our systems seem to be rejected because they represent competition with practices in which local individuals have a vested self-interest. Our systems tend to need a capable advocate to gain a

first try in a given site. Once tried, they generally create advocates and are repeated unless they arouse a competitive situation with superior opposing forces.

A second phenomenon very likely includes a degree of competitiveness. but gets dealt with by a process of adaptation. Instead of an outright rejection of our systems, they are tried in-toto, or partially, and then modified to fit the local situation. They have been broken down to fit the time constraints of college courses, simplified to satisfy desires of administrators in the state where there is a claim that a briefer cognitive overview is sufficient (our data suggest all potential gains are lost by such reductions), or some of the substantive focus is altered for greater relevance such as in the case where a school district adapted RUPS around a focus on drug abuse issues for use with students.

A third phenomenon is suspected based on an independent study of the spread of RUPS conducted by the Far West Laboratory for Educational Research and Development. Their data indicated that the spread may be at least 50 percent greater than commercial sales were showing. Since that particular system is already in the public domain, there are no legal problems in people reproducing it locally. We get indications that, despite our publishers maintaining quite reasonable prices, such local reproduction occurs for many of our systems. It may be that some resistance to our systems is simply a resistance to buying them, not to using them.

A fourth phenomenon involves the sophistication of persons who do training and consulting and the ways they interpret their self-interests.

We think some reject trial of our systems because they believe any packaged training design will lack adequate relevance for their clients. We acknowledge that a design tailored for a particular client, or an instructional design that flows with issues as they emerge from the client, may have greater relevance. We believe our systems should be used with such other training alternatives. We think trainers who reject them with this concern are missing an important point. The point is that our packaged designs can have added, complimentary advantages as related to tailored and unstructured training designs. Conditions for use of our systems, and expectable outcomes, are reasonably well known. The costs of training using our systems are comparatively low. Large numbers of people can receive training in a very short amount of time so that large system norms may be influencable. This spread does not demand many individuals with high level trainer capabilities.

Our impressions on these phenomena are mainly subjective based on a variety of experiences. We propose they are worthy of some careful study. We suspect they have major implications for large system change.

4. Could such training resources be extended to increase the number of trainers with intermediary and advanced capabilities for improving organizations? That is, could packaged training systems be developed to help in training trainers beyond the general systems for interpersonal skills and kinds of problem solving?

Our work to date on the sequence of three training systems titled Preparing Educational Training Consultants (PETC) indicates that answer will be yes. A degree of success may already be noted.

These three systems have the following foci. PETC I: Skills Training is concerned with the use of skills training exercises to help individuals and groups function more effectively in such areas as goal setting, communicating, influencing and decision making. PETC II: Consultation provides the consultant with knowledge and skills to form temporary relationships with clients in order to help them add or strengthen functions needed to achieve a goal or clarify a value. PETC III: Organizational Development provides the consultant with knowledge and skills to aid a client in building and maintaining increased functional capability when feasible and desired.

The two interpersonal systems and three problem solving systems are proposed as prerequisites as individuals move through the three PETC systems. At this stage of development, approximately 500 persons at sites spread across the country have begun this sequence. Two hundred ten have completed PETC II. Forty-nine have completed PETC III and two more groups are under way.

Of the first 113 persons to complete PETC II, half were identified at random and contacted after their PETC II workshop to discover whether follow through consulting was occurring. Thirty eight percent reported they had done some consulting prior to their PETC II training. Fifty percent had had time to do consulting since their training. Of those who had not, the principal explanation for not consulting was that their professional roles had changed and/or did not provide opportunity to do consulting. Those who had done consulting reported an average of about seven clients since their PETC II workshop. All but four percent of those who had been active were able to give numerous specific

illustrations of gains from their PETC training which they had been able to apply with clients.

Systems such as RUPS and Interpersonal Communications are providing a spread of one level of training which is involving many non-experts in conducting training. Even during development, we are beginning to see the combination of systems, including the addition of the PETC's, moving more individuals toward higher levels of trainership. In places such as Minneapolis, Minnesota; Fairfax, Virginia; Portland, Oregon; and Seattle, Washington, this is being done by training groups from the same system as cadres of training consultants. In line with work such as that by Schmuck, Runkel, Saturen, Martell and Derr,[35] we suspect this to be a best strategy for use of our systems.

5. Could a staff developing such training resources contribute to conceptualizing dynamic models that offered resolution of some of the disagreements that were current?

We have offered several conceptualizations as we have created our training systems. Most of their content draws upon preexisting knowledge and models. Some has been a synthesis resulting from our confrontation with apparent discrepancies and dilemmas. How valid and useful our additions may be remains for the most part, to be tested. We have seen our task as developers primarily as one of finding ways to package ideas so that others may try them rather than one of testing ideas.

Some of our major contributions to conceptualizing have included: 1) a definition of three kinds of logical problem issues as technical, theoretical and philosophical which call, respectively, for either system technology, action research or negotiative types of problem solving;

2) a two dimensional model of "phases of planned change" as a sequence of emphasis of kinds of effort to be attended to repeatedly throughout a client relationship as opposed to their being conceived as a linear sequence of tasks;

3) a three dimensional "diagnostic matrix" for considering the locus and nature of a clients functional deficiency at any given moment;

4) a three dimensional "intervention matrix" for considering types of effort which may contribute to facilitating a clients functional capabilities;

5) a model of the development of the social-psychological self of individuals as a basis for defining the particularly demanding human aspects of educational systems as organizations;

6) an evolutionary model of the development of organizations which defines "organizational maturity" as distinct from "organizational growth," the former having to do with the forms and congruence of key functional factors, and the latter having to do with existence and extent of functional capabilities necessary to fulfill the organizations purpose, whatever the characteristic manner in which they are provided. We have proposed that much of the success or failure of organizational development efforts may be based upon the appropriateness of change interventions in relation to an organization's maturity.

We acknowledge that our conceptualizations may raise as many questions as they propose to resolve. Not believing in absolutes, we have offered these concepts supposing that an awareness of questions can be at least as valuable as the presumption of an answer. Our training materials repeatedly emphasize the idea that, in any particular case,

the need of the consultant and client is to discover what is true of their local situation. No theoretical model or presumably generalizable research finding can substitute for that locally relevant truth.

6. Could methodology be advanced, or found, to adequately evaluate efforts to develop training resources and train trainers?

The challenge behind this question has seemed the most difficult to respond to. Under political pressure to "get out products" and sibling rivalry kinds of pressures to avoid stepping into the presumed domains of others roles, we have felt quite constrained in our roles as developers over the years. There has been some greater feeling of freedom in the past two years since formation of the National Institute of Education and some efforts in this area are being reported at Session 13.11 of this AERA Annual Conference. If full support of work on instrumentation, and exploring of some research issues, were to be added as a combination with the kind of development we have been doing, we believe the payoff could be multiplied. Providing such support in money and time will call for more courage and patience than we have yet seen.

Issues and Answers Yet To Be Resolved

We know that the packages of training materials we have created have some significant effects, are generally acceptable and are already being widely used. We know they are beginning to be used in various local strategies. We had initially intended that the programatic effort of creating these training resources should be concluded with a four year

longitudinal study of the combined effect of using them over time in two or three school districts. Our current funder does not intend to support such an effort. A great deal remains to be learned.

In the context of various local strategies to improve school districts, what are the indications and contraindications for use of these packaged training systems in contrast to, or in relation with, other forms of training and consulting? What is the validity of the developmental model of educational organizations we have put forth and what variables affect the predictive validity of its theorums? What reasons might there be for varying impacts resulting from use of the training systems? To the extent that change strategies using these systems have impact, will it be due to the substance of the training, the norms that develop around the process, or the linkages that form as implicit and explicit strategies unfold.

Perhaps the biggest questions are when, whether and how resources may be brought together to carry out research at the level of organizational functioning and improvement efforts? Such studies will cost millions of dollars and each take several years. Assuming that much is lost every day in the current functioning of educational organizations, it seems that an argument for major investment in research in this area can and should be made.